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(56) Documents cited

| | | |
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| GB A 2092638 | GB 1123202 | EP A 0011197 |
| GB A 2030613 | GB 0703783 | |
| GB 1577889 | GB 0480912 | |

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(57) A post support 1 comprising an elongate portion 3 adapted to be driven into the ground, a post attachment plate 7 secured at the top of the elongate portion and formed with outwardly projecting means 21, 22 for supportedly engaging a post 2 positioned alongside plate 7, the plate 7 having therein at least one opening to accommodate a fastener 9 for fastening the post 2 against the plate 7 a reinforcement structure 6 which strengthens the connection between the plate 7 and the elongate portion 3 and locating means (7, 10, 11, 12) for a drift to be employed for driving the support (1) into the ground, the reinforcement structure being shaped to leave clear access to said at least one opening.

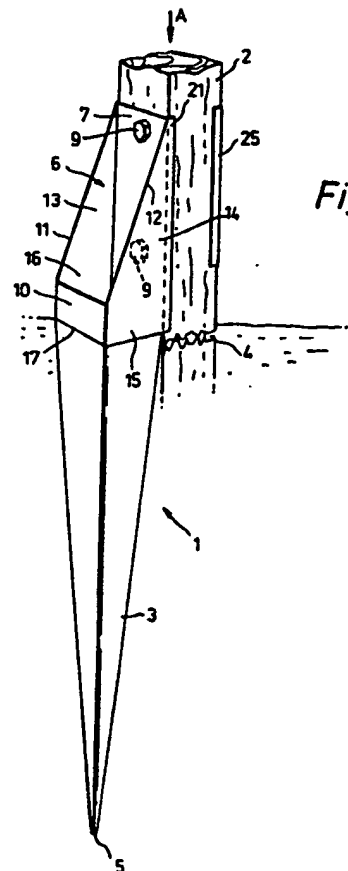


Fig.1.

GB 2139663 A



2/4

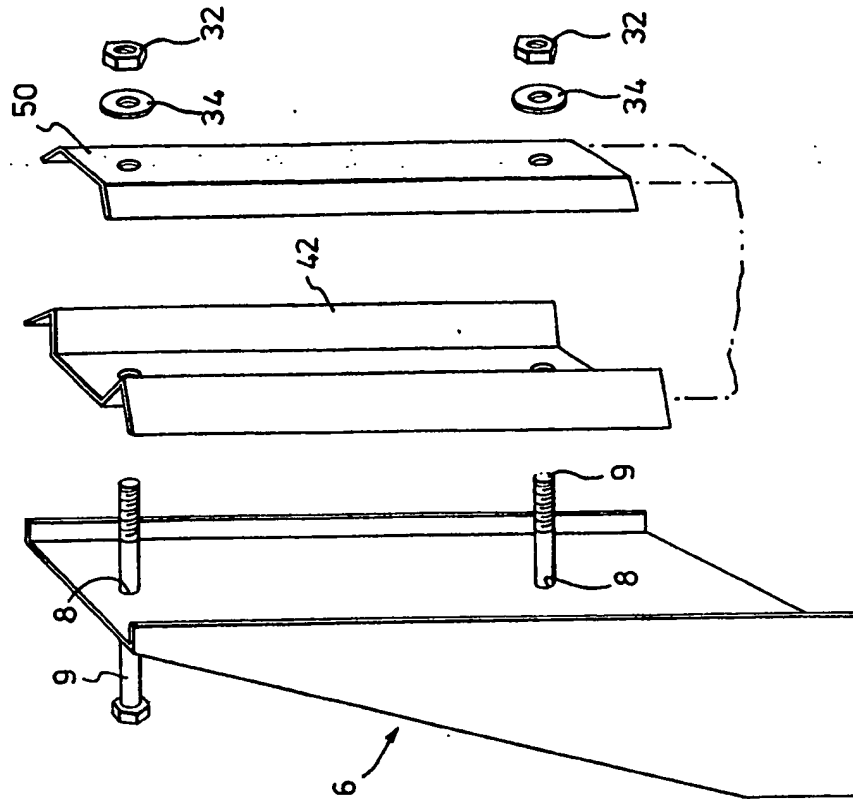


Fig. 5.

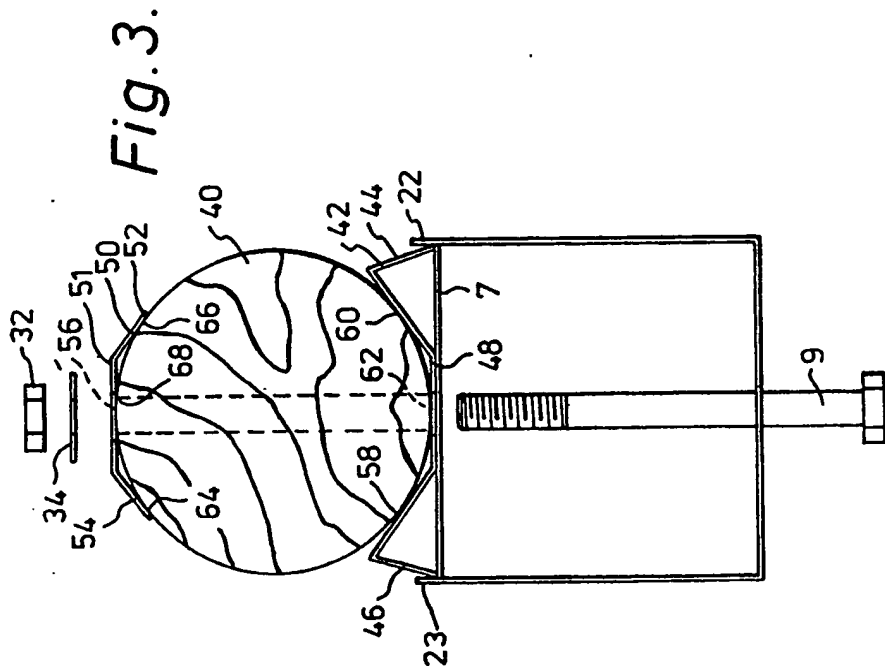


Fig. 3.

Fig. 4.

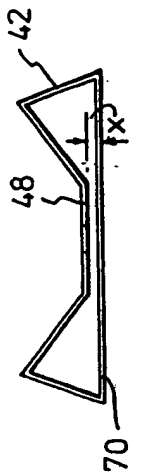


Fig. 6.

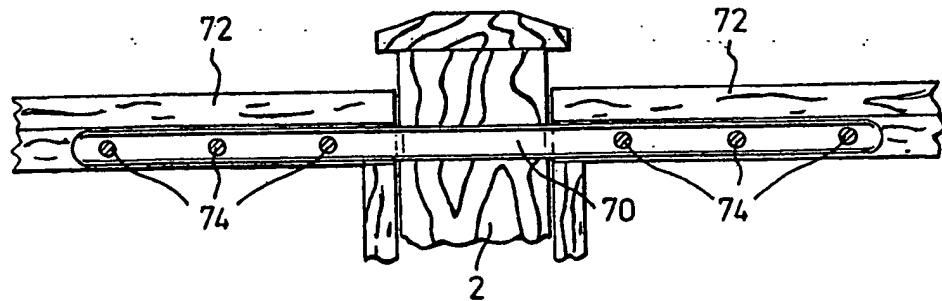


Fig. 7.

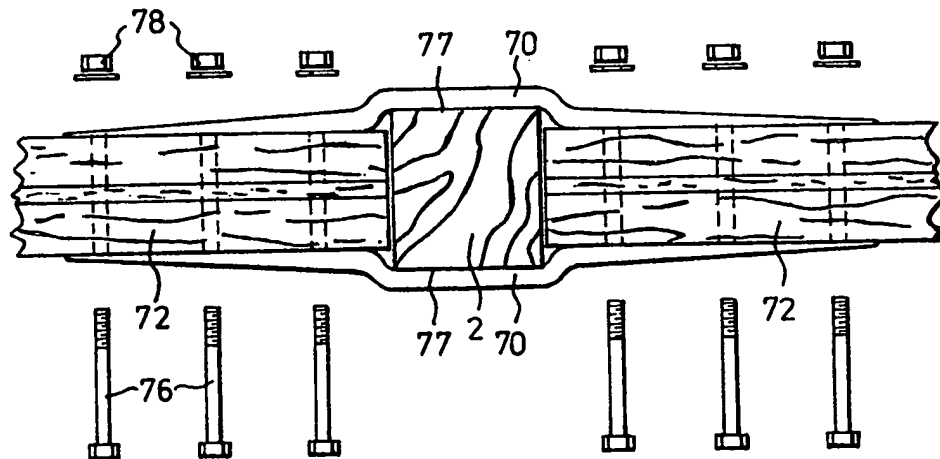
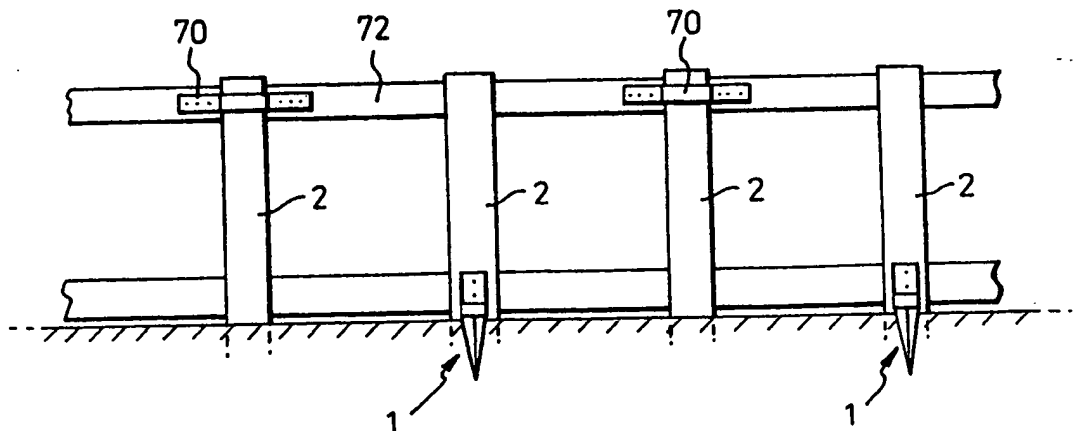


Fig. 8.



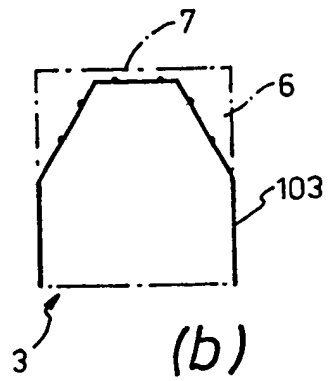
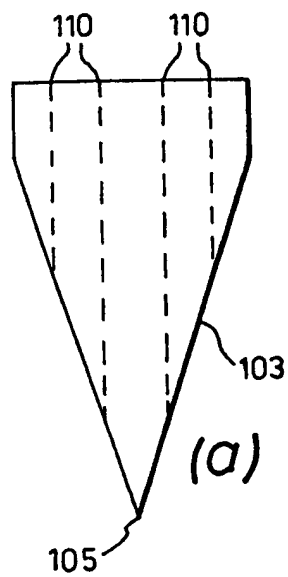
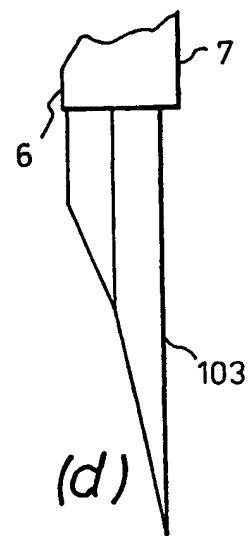
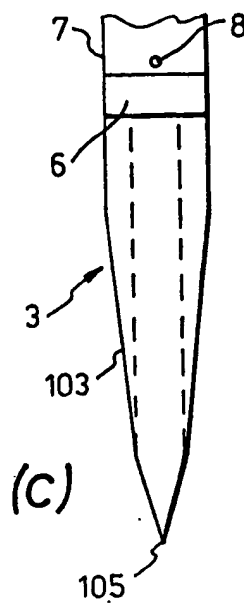


Fig. 9.



SPECIFICATION

Post support

- 5 This invention relates to means for supporting posts.

Posts, used, for example as part of a lap board garden panel fence have conventionally been supported by having a base portion thereof buried in earth or encased in concrete below ground level. A major problem that has been encountered with this method of supporting posts is that, after a period of time, the base of the post rots away or breaks, resulting in the post collapsing or being substantially weakened.

It has been proposed, in UK patent specification no. 1,461,802, to provide metallic post supports that can be hammered into the ground. In a first design, a post is positioned in a locating socket in the upper surface of the post support. The base of the post is thus kept away from ground level and is therefore less susceptible to rotting and general degradation.

A second design of post support is also disclosed in the specification 1,461,802, which is, apparently, capable of supporting a post from one side only. The first design has been sold and used to a significant extent, but the second has not.

An object of the present invention is to provide a post support which can conveniently and effectively be used to support a post from one side robustly, without requiring the post to be moved from its existing vertical position.

The invention provides, from one aspect, a post support comprising an elongate portion adapted to be driven into the ground, a post attachment plate secured at the top of the elongate portion and formed with outwardly projecting means for supportedly engaging a post positioned alongside the plate, the plate having therein at least one opening to accommodate a fastener for fastening the post against the plate, a reinforcement structure which strengthens the connection between the plate and the elongate portion and locating means for locating, in use, a drift to be employed in driving the support into the ground, the reinforcement structure being shaped to leave clear access to said at least one opening.

The invention has the advantages of both of the above-mentioned designs shown in specification no. 1,461,802, without the disadvantages of either. For example, a locating socket is provided which allows a drift to be inserted so that the support may be driven into the ground, without risk of damage, the socket providing strength to the support in a similar way to the first design of UK 1,461,802. However, the base of the post does not have to be packed or whittled down to fit the dimensions of a socket, if the crosssectional

size of the post is different to that of the socket, as the support supports a post from the side, in a similar way to that shown in the second design of UK 1,461,802.

The invention provides, from another aspect, a method of supporting a fence wherein alternate posts of a fence are supported by a post support which comprises an elongate portion adapted to be driven into the ground, connected to a post engagement portion, for supportedly engaging a post positioned alongside the engagement portion, the remaining posts of said fence being connected to fence cross-members by means of supporting brackets.

This method allows a fence to be structurally reinforced or renovated in a robust and relatively inexpensive manner without requiring the fence to be dismantled which invariably damages old fence panels necessitating their replacement at high cost with odd new unsightly unweathered panels.

Embodiments of the invention will now be described by way of example with reference to the accompanying drawings in which:

Figure 1 is a perspective view showing a post support according to the invention, in use;

Figure 2 is a plan view of the post support taken in the direction of the arrow A of figure 1;

Figure 3 is a plan view of part of a second embodiment of the invention;

Figure 4 shows detail of an insert used in the embodiment of figure 3;

Figure 5 is a perspective view of some of the components of the embodiment shown in figure 3;

Figure 6 shows a fence panel support;

Figure 7 is a plan view of the fence panel support shown in figure 6;

Figure 8 shows a method of restoring a fence using the invention;

Figure 9 a-d shows another embodiment of the invention having an alternative type of ground engaging portion.

With reference to figures 1 and 2 a post support assembly 1 is shown in operation attached to a post 2.

The support 1 has a ground engaging portion 3, that is elongate and of cruciform cross-section (see figure 2), tapering to a point at its free end 5. The ground engaging portion 3 is attached to a post attachment plate 7 which is provided with holes 8 that are engaged by bolts 9, said bolts being used to attach the post 2 to the post support 1.

The connection between the plate 7 and the ground engaging portion 3 is strengthened by means of a reinforcing structure 6.

To allow access to the bolts 9, so that they may be tightened in use, side 10 of the reinforcement structure 6 is of reduced height, the side 10 being connected to the plate 7 by remaining identical sides 11, 12

basis for supporting the fence, while supporting brackets 70 are attached between the fence cross members 72 and the alternate respective posts 2, this combination providing adequate support for the fence as a whole.

The bracket 70, which is formed from sheet steel and is channel shaped in cross-section, is shown in more detail in figures 6 and 7 in which post 2 is positioned between two fence cross members 72, two identical brackets 70 being positioned on opposite faces of the cross members 72, the post 2 lying therebetween. The bracket 70 is provided with holes 74 to take a nut and bolt combination 76, 78. In use, holes are drilled through the cross member 72 to take the bolts 76 so that the support brackets 70 may be positioned and clamped relative to the cross members 72 and the post 2, to hold the cross members 72 and the post 2 together. The inner sides 77 of the brackets 70 abut the post 2 to hold it firmly in position.

Depending on the particular state of the fence that is being repaired, the arrangement shown in figure 8 can be modified so that the posts that have been most severely rotted may be supported by the posts 1, while posts that are still of reasonable strength can be connected to the posts supported by the post supports 1 by means of the brackets 70. Also, the number of the posts 2 about which the brackets 70 are connected can be increased; for example, the brackets 70 can be attached to all the posts 2, this leading to a more robust construction. It should be noted that, as with the post support 1, the affixing of the brackets 70 does not require the fence to be dismantled or shifted in any way.

40 CLAIMS

1. A post support comprising an elongate portion adapted to be driven into the ground, a post attachment plate secured at the top of the elongate portion and formed with outwardly projecting means for supportedly engaging a post positioned alongside the plate, the plate having therein at least one opening to accommodate a fastener for fastening the post against the plate, a reinforcement structure which strengthens the connection between the plate and the elongate portion, and locating means for locating, in use, a drift to be employed in driving the support into the ground, the reinforcement structure being shaped to leave clear access to said at least one opening.

2. A post support as claimed in claim 1 further comprising an engagement plate having at least one further opening therein for accommodation of said fastener, said engagement plate having further outwardly projecting means for supportedly engaging a post.

3. A post support as claimed in claim 1 or claim 2 wherein said attachment plate and said engagement plate are shaped so as to

engage opposing respective sides of a post of rectangular cross-section.

4. A post support as claimed in claim 1 or claim 2 further comprising an insert, said insert being engaged by said outwardly projecting means so that the insert supportedly engages the post.

5. A post support as claimed in claim 4 wherein said insert comprises a plurality of engagement portions formed at different respective angles to each other.

6. A post support as claimed in claim 4 or claim 5 wherein said insert is shaped so as to engage a post of substantially circular cross-section.

7. A post support as claimed in claim 4, 5 or 6 wherein said engagement plate is shaped so as to engage a post of substantially circular cross-section.

8. A post support as claimed in any of claims 4 to 7 wherein said insert is formed from resilient material.

9. A post support as claimed in any of claims 2 to 8 wherein said engagement plate is formed from resilient material.

10. A post support as claimed in any preceding claim wherein said ground engaging portion is of cruciform cross-section tapering to a point at its free end.

11. A post support as claimed in any of claims 1 to 9 wherein said ground engaging portion is formed from a single sheet of material.

12. A post support as claimed in claim 10 wherein said ground engaging portion is of channel like cross section.

13. A post support as claimed in any preceding claim wherein said support is manufactured from steel.

14. A method of supporting a fence wherein alternate posts of a fence are supported by a post support which comprises an elongate portion adapted to be driven into the ground, connected to a post engagement portion, for supportedly engaging a post positioned alongside the engagement portion, the remaining posts of said fence being connected to fence cross-members by means of supporting brackets.

15. A post support as hereinbefore described with reference to figure 1 or figure 2 of the accompanying drawings.

16. A post support as hereinbefore described with reference to any of figures 3 to 5 of the accompanying drawings.

17. A post support as hereinbefore described with reference to any of figures 6 to 8 of the accompanying drawings.

18. A post support as hereinbefore described with reference to any of figures 1 to 8 including a ground engaging portion as shown in figure 9.

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